

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please add the following paragraphs after the paragraph starting at page 7, line 5:

According to yet another aspect of this invention, there is provided a method of manufacturing a semiconductor device, comprising implanting an electrically inactive first impurity over substantially one entire side of a semiconductor substrate, excluding a region below a gate electrode, to form an implanted layer on an upper portion of the gate electrode and a surface layer of the semiconductor substrate; and carrying out a heat treatment by light on the one side of the semiconductor substrate implanted with the first impurity, wherein the first impurity is implanted into a semiconductor element forming region formed in the surface layer of the semiconductor substrate including the gate electrode, and an upper portion of an isolation region formed in the surface layer of the semiconductor substrate.

According to yet another aspect of this invention, there is provided a method of manufacturing a semiconductor device, comprising providing a gate electrode having a gate insulating film on one side of a semiconductor substrate; implanting an electrically inactive first impurity over substantially the entire side of the semiconductor substrate provided with the gate electrode, excluding a region below the gate electrode, to form an implanted layer on an upper portion of the gate electrode and a surface layer of the semiconductor substrate, and implanting an electrically active second impurity having a predetermined conduction type to the semiconductor substrate to a region adjacent to

the gate electrode of the semiconductor substrate using the gate electrode as a mask; forming shallow source/drain diffusion regions having the predetermined conduction type, the shallow source/drain diffusion regions being formed in a manner such that a heating treatment using light carried out on the semiconductor substrate implanted with the first and second impurities activates the second impurity; providing a gate sidewall film on the side of the semiconductor substrate around the gate electrode; implanting the first impurity to the side of the semiconductor substrate, excluding a region below the gate electrode, and implanting the second impurity on the semiconductor substrate in a region adjacent to the gate sidewall film of the semiconductor substrate using the gate electrode and the gate sidewall film as a mask; and forming deep source/drain diffusion regions having the predetermined conduction type, and continuing with the shallow source/drain diffusion regions, the deep source/drain diffusion regions being formed in a manner such that the heating treatment carried out on the semiconductor substrate implanted with the first and second impurities activates the second impurity, wherein the first impurity is implanted into a semiconductor element forming region formed in the surface layer of the semiconductor substrate including the gate electrode, an upper portion of an isolation region formed in the surface layer of the semiconductor substrate, and an upper portion of the gate sidewall film.

According to yet another aspect of this invention, there is provided a method of manufacturing a semiconductor device comprising implanting at least one of a group IV-A element as an electrically inactive first impurity over substantially one entire side of a semiconductor substrate, to form an implanted layer on a surface layer of the semiconductor substrate; and carrying out a heat treatment using light on the one side

of the semiconductor substrate implanted with the first impurity, the light having a main spectrum in a range of wavelength shorter than a silicon (Si) absorption end, and an emitting time of the light being 100 msec or less, wherein the first impurity is implanted into a semiconductor element forming region formed in the surface layer of the semiconductor substrate including a gate electrode, and an upper portion of an isolation region formed in the surface layer of the semiconductor substrate.

According to yet another aspect of this invention, there is provided a method of manufacturing a semiconductor device comprising providing a gate electrode having a gate insulating film on one main surface of a semiconductor substrate; implanting at least one of a group IV–A element as an electrically inactive first impurity over substantially an entire side of the semiconductor substrate provided with the gate electrode, excluding a region below the gate electrode, to form an implanted layer on an upper portion of the gate electrode and a surface layer of the semiconductor substrate, and implanting an electrically active second impurity having a predetermined conduction type on the semiconductor substrate in a region adjacent to the gate electrode of the semiconductor substrate using the gate electrode as a mask; forming shallow source/drain diffusion regions having the predetermined conduction type, the shallow source/drain diffusion regions being formed in a manner such that a heating treatment using light carried out on the semiconductor substrate implanted with the first and second impurities activates the second impurity, the light having a main spectrum in a range of wavelength shorter than a silicon (Si) absorption end, and an emitting time of the light being 100 msec or less; providing a gate sidewall film on the side of the semiconductor substrate around the gate electrode, implanting the first impurity to the

side of the semiconductor substrate, excluding a region below the gate electrode and the gate sidewall film, and implanting the second impurity on the semiconductor substrate in a region adjacent to the gate sidewall film of the semiconductor substrate using the gate electrode and the gate sidewall film as a mask; and forming deep source/drain diffusion regions having the predetermined conduction type, and continuing with the shallow source/drain diffusion regions, the deep source/drain diffusion regions being formed in a manner such that the heating treatment using the light carried out on the semiconductor substrate implanted with the first and second impurities activates the second impurity, wherein the first impurity is implanted into a semiconductor element forming region formed in the surface layer of the semiconductor substrate including the gate electrode, an upper portion of an isolation region formed in the surface layer of the semiconductor substrate, and an upper portion of the gate sidewall film.